



GAS-POWERED WATER PUMP

OWNER'S MANUAL



WARNING: Read carefully and understand all **INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item #999362

Thank you very much for choosing a Wel-Bilt™ product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. The distributor cannot be responsible for issues arising from modification. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted the distributor to determine if it can or should be performed on the product.

For technical questions please call **1-800-222-5381**.

INTENDED USE

Portable gas-powered water pump serves agricultural, industrial, fire fighting, construction, fishery, etc. applications.

TECHNICAL SPECIFICATIONS & PACKING LIST

Self-priming water pump	Type	EP25
	Suction port diameter	1 in. (25mm)
	Max flow	1585 GPH (6000LPH)
	Max head	82 ft. (25m)
	Max suction head	23 ft. (7m)
Engine	Model	1E36FN-2
	Type	2-stroke, air-cooled, single-cylinder
	Displacement	32.6cc
	Fuel/oil mixed ratio	(50:1)
	Fuel tank capacity	1.05 qts. (1 L)
	Starting system	Recoil starter

GENERAL SAFETY RULES



WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.



WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into

this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

WORK AREA

- **Keep work area clean**, free of clutter and well lit. Cluttered and dark work areas can cause accidents.
- **Do not use your water pump where there is a risk of causing a fire or an explosion**; e.g. in the presence of flammable liquids, gasses, or dust. Gasoline engines can create sparks, which may ignite the dust or fumes.
- **Keep children and bystanders** away while operating a water pump. Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area.
- **Be aware of all power lines, electrical circuits**, water pipes and other mechanical hazards in your work area, particularly those hazards below the work surface hidden from the operator's view that may be unintentionally contacted and may cause personal harm or property damage.
- **Be alert of your surroundings**. Using water pumps in confined work areas may put you dangerously close to cutting tools and rotating parts.

INTERNAL COMBUSTION ENGINE SAFETY



WARNING: Internal combustion engines present special hazards during operation and fueling. Read and follow the warning instructions in the engine Owner's Manual and the safety guidelines below. Failure to follow the warnings and safety standards could result in severe injury or death.

- **DO NOT** run the machine indoors or in an enclosed area such as a deep trench unless adequate ventilation, through such items as exhaust fans or hoses, is provided. Exhaust gas from the engine contains poisonous carbon monoxide gas; exposure to carbon monoxide can cause loss of consciousness and may lead to death.
- **DO NOT** smoke while operating the machine.
- **DO NOT** smoke when refueling the engine.
- **DO NOT** refuel a hot or running engine.
- **DO NOT** refuel the engine near an open flame.
- **DO NOT** spill fuel when refueling the engine.
- **DO NOT** run the engine near open flames.
- **ALWAYS** refill the fuel tank in a well-ventilated area.
- **ALWAYS** replace the fuel tank cap after refueling.
- **ALWAYS** check the fuel lines and the fuel tank for leaks and cracks before starting the engine. Do not run the machine if fuel leaks are present or the fuel lines are loose.
- **ALWAYS** avoid contact with hot fuel, oil, exhaust fumes and solid surfaces.

PERSONAL SAFETY

- **Stay alert**, watch what you are doing and use common sense when operating a power tool. Do not use a water pump while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating water pumps may result in serious personal injury.

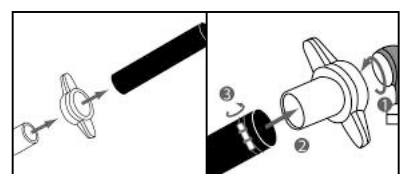
- **Dress properly.** Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Air vents often cover moving parts and should be avoided.
- **Use safety apparel and equipment.** Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use as dust mask in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.
- **Do not overreach.** Keep proper footing and balance at all times.
- **Remove adjusting keys or wrenches** before connecting to the power supply or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.

TOOL USE AND CARE



WARNING: This pump is designed to pump water only. Never pump flammable liquids like gasoline or diesel.

- **Do not force the water pump.** Pumps do a better and safer job when used in the manner for which they are designed.
- **Never use a water pump** with a malfunctioning switch. A water pump that cannot be controlled with the switch is dangerous and must be repaired by an authorized service representative before using.
- **Disconnect spark plug from engine** before servicing, adjusting, installing accessories or attachments, or storing. Such preventive safety measures reduce the risk of starting accidentally.
- **Store idle water pumps.** When pumps are not in use, store them in a dry, secure place out of the reach of children. Inspect water pumps for good working condition prior to storage and before re-use.
- **Use only accessories that are recommended** by the manufacturer for your model. Accessories that may be suitable for one water pump may create a risk of injury when used on another pump.
- **Keep guards in place** and in working order.
- **Never leave tool** running unattended.
- Theoretically, air pressure and the suction head of pump will decrease while the altitude increases. The value of decrease can be estimated by minus local atmosphere value from 10m (meter water column).
- The filter net must be immersed in water at least a foot (0.3m) to avoid sucking air. When used outdoors, immerse filter not less than 47 inches (1.2m) from river bottom and river bank to avoid suction of stone or weeds.
- **Always** be sure operator is familiar with proper safety precautions and operation techniques before using machine.
- **Never touch** the engine or muffler while the engine is on or immediately after it has been turned off. These areas get hot and may cause burns.
- **Always** close fuel valve on engines when machine is not being operated.
- **Always** operate machine with all safety devices and guards in place and in working order. DO NOT modify or defeat safety devices. DO NOT operate machine if any safety devices or guards are missing or inoperative.
- **NOTE:** All Federal and State laws and any regulation having jurisdiction covering the safety requirements for use of the machine take precedence over the statements in this manual. Users of this machine must adhere to such regulations.



ASSEMBLY

Installation of connective soft pipe:

Affix the soft rubber pipe to the connector of inlet pipe. Please note it must be installed over the thread. Tighten it with clipper joint.

On the other end of the rubber pipe, a filter should be attached.



OPERATION



IMPORTANT:

- Before starting, remove self-suction plug and pour water in the pump until water overflows. When filled, tighten the plug firmly.
- Fully tighten self-suction plug, suction hose and others connections. If they are loose, air will enter into your pump, which may hinder the pump's operation.

STARTING:

- Press the primer pump repeatedly until there are no air bubbles visible in the fuel discharge line. Then move the throttle lever to the starting position.

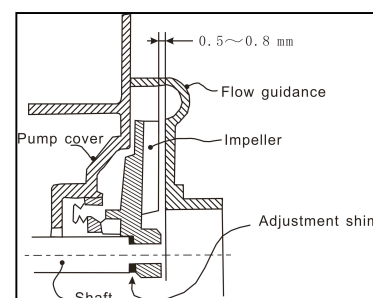
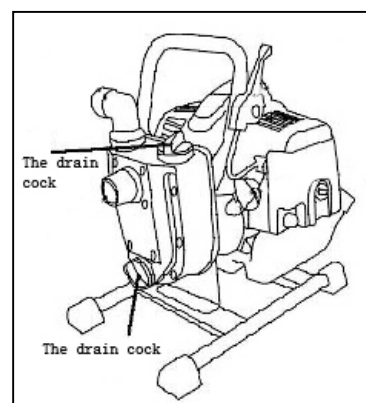
NOTE: This is not necessary if the engine is warm.

- If the engine is cold, move the choke lever to the closed position , pull the recoil starter until the engine sounds like it wants to run. Then move the choke lever to the open position , pull the recoil starter until the engine starts

NOTE: This is not necessary if the engine is warm.

- After the engine has started, move the choke lever to the open position. Allow the engine to warm up 2-3 minutes before using.
- Move the throttle lever to the fastest position and begin to work.
- When the pump is used in winter, screw off the drain cock under the pump and draw off water thoroughly after stopping the machine. This prevents the pump from being damaged by frozen water.
- If the gap between impeller and the surface of flow guidance is over 1/32 inch (1mm), it can continue to be used after adding an adjustment shim on the shaft shoulder.
- When changing self-priming pump's machinery seal, be sure to apply adhesive between the seal and pump cover. Otherwise, a heavy hit may break the seal during operation.

When changing machinery seal, install silent ring set in the pump cover, install movable ring set in the engine output shaft. Be careful not to force the ring set when installing to prevent breaking the grind piece.



The fuel of the pump is a fuel/oil mixture (50:1 ratio).

Keep fire and other explosives and inflammables away from the pump. Operate the pump on a level surface to prevent fuel from spilling.

Do not add fuel into fuel tank or crank case when the machine is running.

Exhaust gas contains poisonous carbon monoxide. Never use the machine without proper ventilation, otherwise people and animals would be affected.



Do not touch muffler and muffler cover while the machine is running or had just been

turned off. The muffler area will be very hot. Allow to cool before servicing, if needed.

Run new or newly maintained machine at low speed with low load during the first 20 hours. Do not run it at high speed with full load.

MAINTENANCE



WARNING: Make sure this tool is disconnected from its power source before attempting any maintenance, cleaning, or inspection.

- **Maintain your water pump.** It is recommended that the general condition of any tool be examined before it is used. Keep your tools in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, turn the tool off immediately and have the problem corrected before further use. Have necessary repairs made by qualified service personnel.
- **Cleaning.** Use only soap and a damp cloth to clean your water pump. Many household cleaners are harmful to plastics and other insulation.

TROUBLESHOOTING MALFUNCTIONS AND REMEDIES

Malfunction	Cause	Remedy
The pump cannot pump water.	Water is not enough.	Refill water into the pump.
	Inlet pipe leakage.	Check inlet pipe and connector of pipe, change the pipe or tighten the screw.
	Speed of pump is too low.	Check speed and find cause for remedy.
	The filter net is obstructed.	Check and clean up.
	It is over the capacity of pump.	Check the position of installation.
	The seal was damaged and air leaked.	Change the machinery seal set.
The flow of water is not enough	The filter net, pipeline or impeller is choked.	Clean the obstruction.
	Speed is low.	Increase speed.
	Impeller's seal is worn.	Adjust the gap or change impeller and machinery seal.
	Inlet pipe leaking.	Check inlet pipe and connector of pipe, change the pipe or screw down the bolt.

Malfunction	Cause	Remedy
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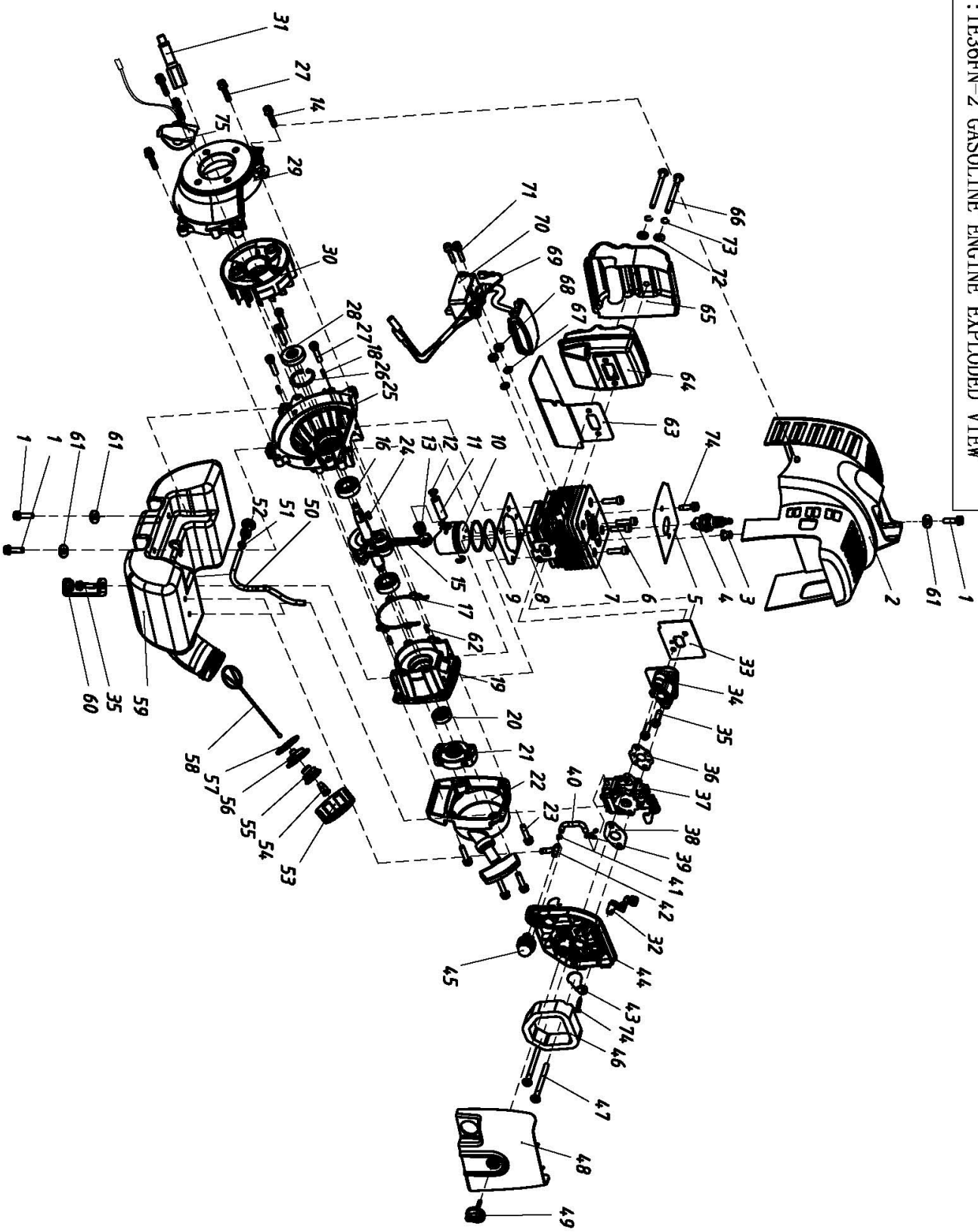
The flow of water is not enough	Impeller is damaged and leaking	Replace with a new impeller.
	Total head is too high. There is air in the pump or inlet, air leak into the seal.	Check the reason, adjust it. Screw off air drain screw cock, and eliminate the air. Check the pipeline or change machinery seal.
	Speed of engine is not stable.	Adjust the speed of engine.
Power consumption of pump is too great	There is contact between impeller and flow guidance.	Listen to the sound carefully; if the impeller is making contact with the case, then adjust.
	The impeller is obstructed by weeds or other debris.	Check and clean up.

Malfunction	Cause	Remedy
No flow at all	The connector of inlet pipe is loose or leakage.	Check inlet pipeline and remedy.
	Suction head is too high and causing cavitations.	Check suction head and lower the position of pump.
Excessive vibration or noise	Suction head is too high and causing cavitations.	Check suction head and lower the position of pump.
	Output of water is too large.	Decrease the output of water.
	Inlet pipe is obstructed by foreign body so the resistance is too large.	Check inlet pipe and filter net and clean up.
	Rotary part is loose.	Listen carefully and inspect the part which causes the noise. Stop the machine to adjust.
	Installing for pump unit is not stable.	Stop the machine to check and adjust.

Malfunction	Cause	Remedy
Excessive vibration or noise	There is air in the pump or pipeline.	Screw off air drain screw cock and expel the air.
	Impeller damaged.	Stop the machine to check and replace with a new impeller.

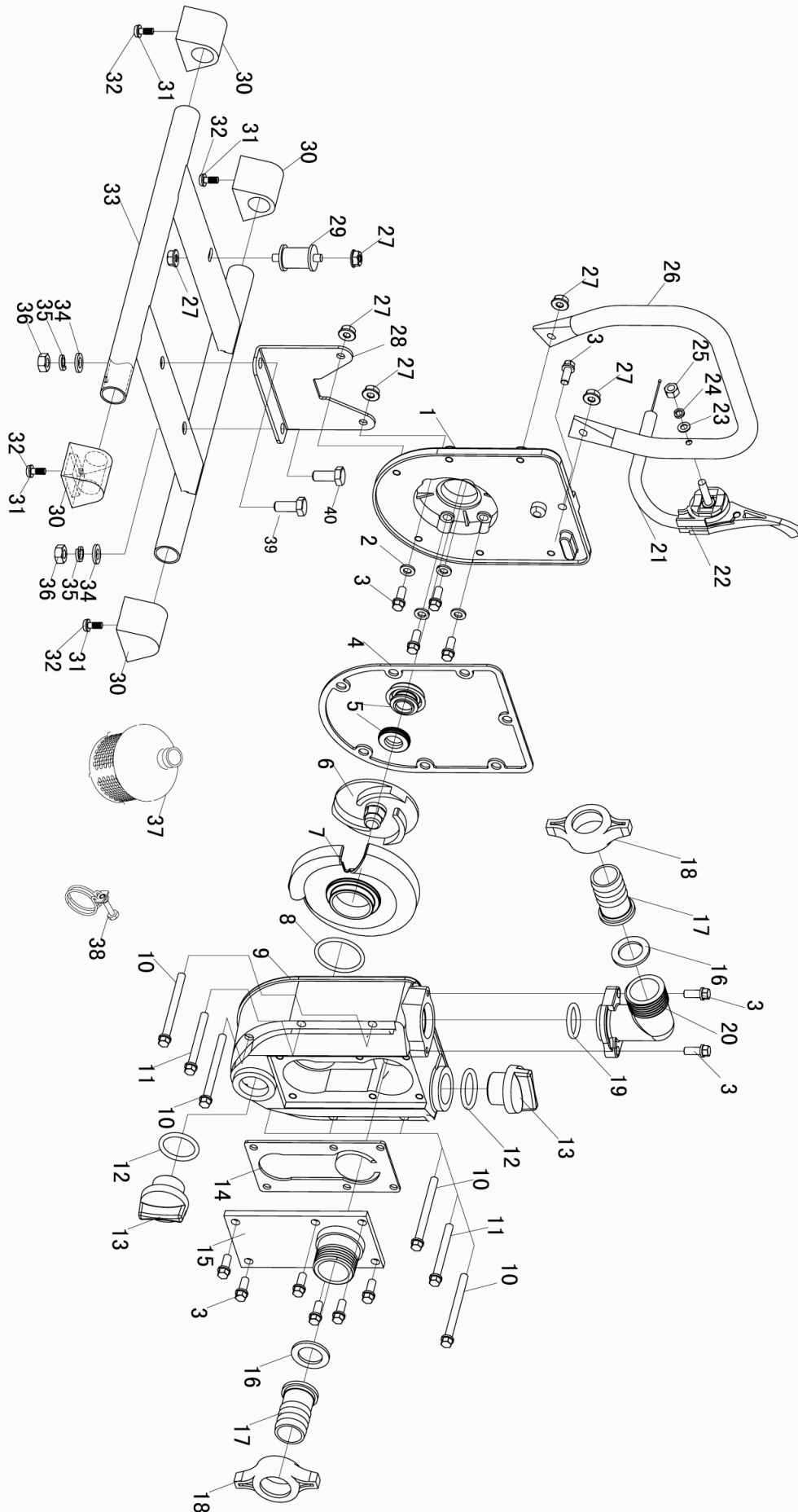
DIAGRAM & PARTS LIST

FIG. 1: 1E36FN-2 GASOLINE ENGINE EXPLODED VIEW



Part#	Description	Qty.	Part#	Description	Qty.
1	Bolt assembly M5x20	3	39	Clip, pipe	1
2	Housing	1	40	Pipe	1
3	Space, housing	1	41	Clip, pipe	1
4	Spark plug RCJ6Y	1	42	Pipe	1
5	Baffle of cylinder	1	43	Choke	1
6	Bolt M5x20	4	44	Base, cleaner	1
7	Cylinder	1	45	Primer pump assembly	1
8	Gasket, cylinder	1	46	Air filter element	1
9	Ring, piston	2	47	Bolt assembly M5x60	2
10	Piston	1	48	Cover, cleaner	1
11	Pin, piston 9x31	1	49	Knob, cover	1
12	Ring, snap	1	50	Pipe	1
13	Needle bearing	1	51	Clip, pipe	1
14	Bolt assembly M5x12	1	52	Fuel filter comp	1
15	Crank shaft assembly	1	53	Cap, fuel tank	1
16	Bearing 6001/P53	2	54	Valve, fuel cap	1
17	Gasket, crankcase	1	55	Holder, valve	1
18	Pin	1	56	Holder, stopper	1
19	Rear crankcase	1	57	Gasket, fuel cap	1
20	Oil seal 12x22x7	1	58	Stopper	1
21	Starter pulley comp	1	59	Fuel tank	1
22	Starter comp	1	60	Bracket of pump	1
23	Bolt assembly M5x16	4	61	Washer 5	3
24	Woodruff key	1	62	Pin 3x10	2
25	Front crankcase	1	63	muffler Gasket	1
26	Retaining ring 28	1	64	Muffler assembly	1
27	Bolt M5x25	8	65	Heat shield	1
28	Oil seal 12x28x7	1	66	Bolt M5x55	2
29	Fan cover	1	67	Washer 4	2
30	Rotor	1	68	Space, ignition coil	2
31	Connect shaft	1	69	Ignition coil comp	1
32	Chock handle	1	70	Bolt assembly M4x20	2
33	Gasket, insulator	1	71	Washer 5	12
34	Insulator	1	72	Washer 5	12
35	Bolt assembly M5x20	3	73	Bolt ST3X12	1
36	Gasket, carburetor	1	74	Bolt assembly M5x12	1
37	Carburetor comp	1	75	Stop button comp	1
38	Gasket, carburetor	1			

FIG. 2: QGZ25-30N WATER PUMP EXPLODED VIEW



Part#	Description	Qty.	Part#	Description	Qty.
2-1	1" Pump Housing	1	2-22	Throttle Lever	1
2-2	Washer $\Phi 6.5$	4	2-23	Washer $\Phi 5$	1
2-3	Screw M6 \times 16	13	2-24	Washer $\Phi 5$	1
2-4	Gasket	1	2-25	Nut M5	1
2-5	Mechanical Seal	1	2-26	Handle	1
2-6	Impeller	1	2-27	Nut M6	6
2-7	Volute Casting	1	2-28	Bracket Pump	1
2-8	Volute Casting O-ring	1	2-29	Rubber Pillar	1
2-9	Pump Cover	1	2-30	Anti Vibration rubber	4
2-10	Screw M6 \times 65	4	2-31	Screw M5 \times 12	4
2-11	Screw M6 \times 55	2	2-32	Washer $\Phi 5$	4
2-12	Priming Cap O-ring	2	2-33	Base	1
2-13	Priming Cap	2	2-34	Washer $\Phi 8$	2
2-14	Return Valve Gasket	1	2-35	Washer $\Phi 8$	2
2-15	Inlet Valve	1	2-36	Nut M8	2
2-16	Gasket, Inlet/Outlet	2	2-37	Filter Assembly	1 set
2-17	Pipe Connector	2	2-38	Clamp	3
2-18	Connector Nut	2			
2-19	Discharge Flange O-ring	1			
2-20	Discharge Flange	1			
2-21	Cable Comp	1			

For replacement parts and technical questions, please call **1-800-222-5381**.

WARRANTY

One-Year Limited Warranty



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Northern Tool + Equipment Co.,
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P.O. Box 1499 Burnsville, MN 55337-0499
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